

Chapter 6

Conclusion

The deregulation of the electricity market presents both enormous risks and great opportunities for the development of clean renewable energy sources. The main risk is that renewables will be at a competitive disadvantage against fossil fuels. The failure of the market to value public benefits like environmental protection and fuel diversity, as well as market barriers, will make it hard for relatively new technologies to become commercialized and enter the mainstream marketplace. If this occurs, the result could be even less use of renewable energy for electricity generation than exists today, with corresponding higher levels of pollution, greenhouse gases, and other problems.

However, the new market also creates potential opportunities for renewables *if* appropriate policy steps are taken. This report has described seven practical measures that would greatly increase the contribution of renewable sources to the nation's electricity supply.

At the beginning of the debate over deregulation of electricity generation, renewable energy advocates sometimes debated which of these measures were better or more important than the other. In particular, the relative merits of the renewables portfolio standard and of public benefits funds were hotly debated in California, the first state to implement retail competition.¹ The relative importance of trying to make markets for renewable energy work versus enacting mechanisms that recognize and internalize the public benefits of renewables was also widely discussed in California and elsewhere.

As the debate has matured, more recent restructuring decisions have incorporated multiple public benefits mechanisms and paid closer attention to making the market work more effectively. All of these approaches can be synergistic, rather than competitive.

No matter what industry structures states choose to adopt—retail competition, wholesale competition, regulation with integrated resource planning, public ownership of utilities, electricity cooperatives, or any

combination—resource planning decisions and markets can be structured to be fair to clean energy resources, or to discriminate against them. Legislators and regulators who want to minimize the environmental impact of electricity generation while reducing costs will want to ensure that utility customers have the opportunity to make green choices, that they are well-informed about their choices and their consequences, and that green generators have fair access to the grid and to customers. Fair competition also requires fair pollution rules, with comparable emission standards for all power plants.

At the same time, no matter how fair specific market rules are, it is important that public benefits that are not reflected in market prices be recognized and supported through some public mechanism. The two major mechanisms that have been proposed and adopted in various jurisdictions for preserving renewables public benefits—the renewables portfolio standards and public benefits funding—can serve complementary functions. The RPS provides a market-friendly mechanism to ensure the sustained orderly development of renewables close to being market-ready, while maximizing competition. Public benefits funding can help jump-start the renewables market, be targeted to overcome specific market barriers in given regions, and advance research, development and commercialization of technologies which have long-run potential but are not as cost-effective in the short-term.

Various states are currently serving as experimental laboratories for renewable policy, as well as major drivers of renewables development. They will provide important new lessons and models for moving forward. The Massachusetts and Connecticut restructuring laws warrant special attention as models for having adopted the RPS and funding mechanisms together, along with net metering, information disclosure, emissions performance standards, and support for distributed generation. California will continue to be a major bellwether, with a substantial lead in implementing the nation's



largest funding program for renewables, along with a number of the other policies discussed in this report. Pennsylvania's market structure may allow the first significant test of the impacts of green marketing. Continued implementation of pre-restructuring renewables requirements in Minnesota, Iowa, Wisconsin and Texas will provide major near-term development experience for the renewables industry.

The majority of states have not yet considered these policies. Congress is being called on to repeal the statute that has provided the most support for renewables to

date. If the states enacting policies described in this report are seen as models that can be replicated and improved upon in other states and at the federal level, America may yet switch to cleaner renewable electricity, and realize substantial environmental and economic benefits.

REFERENCES

¹ Ryan Wiser, Steven Pickle, and Charles Goldman, Lawrence Berkeley National Laboratory, "Renewable Energy Policy and Electricity Restructuring: A California Case Study," *Energy Policy*, 26(6):465, 1998.

